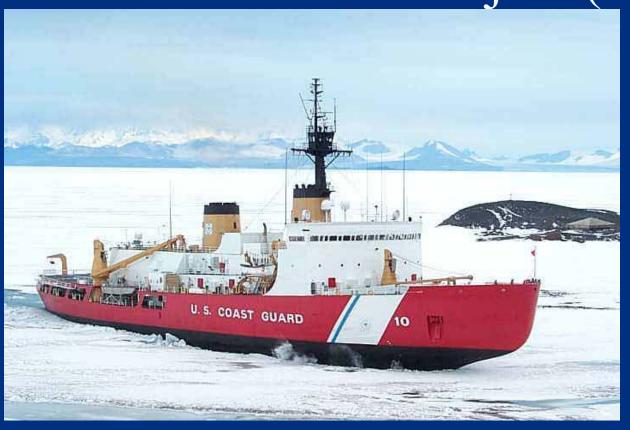
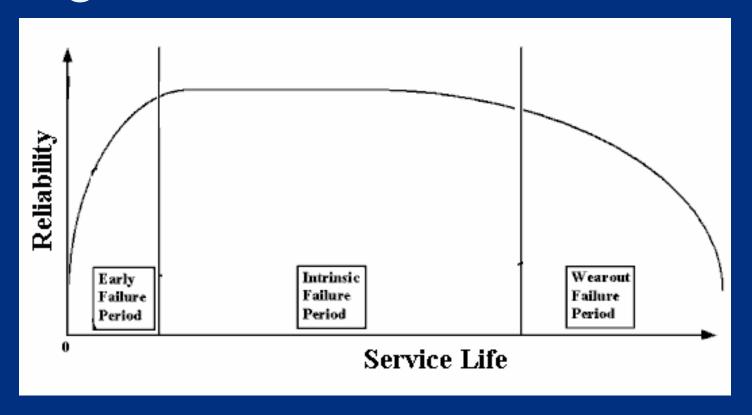
POLAR-class Icebreakers Service Life Extension Project (SLEP)





Designed Service Life



POLAR-class built in mid 70's with a designed service life of 30 yrs RIP was designed to improve reliability, not to extend service life



2002 SSMEB

Ship's Structure and Machinery Evaluation Board

- conducted survey on POLAR SEA in June 2002
- reached the end of economic service life
- minimum mission reliability can be maintained for 4-7yrs*
 - if recommended maintenance discrepancies corrected
 - most discrepancies have not been corrected
- hull in excellent condition 25+ yrs of service life

AMSEC POLAR Mid-Life Evaluation Report

- conducted independent survey on POLAR STAR
- findings and recommendations similar to SSMEB



Service Life Evaluation Board

SLEB charter signed in February 2002

Final report delivered in June 2003

Recommendations:

- increase in maintenance funding is needed to sustain existing mission capability for the near term
- recommend pursuing a SLEP, which must be initiated as soon as possible

Action items and recommendations have been followed and completed to date



POLAR SLEP Matrix Team

Personnel from Coast Guard offices involved with the polar icebreaking mission.

Provide valuable input on key decisions that need to be made at this point during the acquisition process.

Goal of matrix team is to provide resources that will accelerate the acquisition process and improve the end product.



Resource Proposals

Polar Maintenance RP (06-149-0)

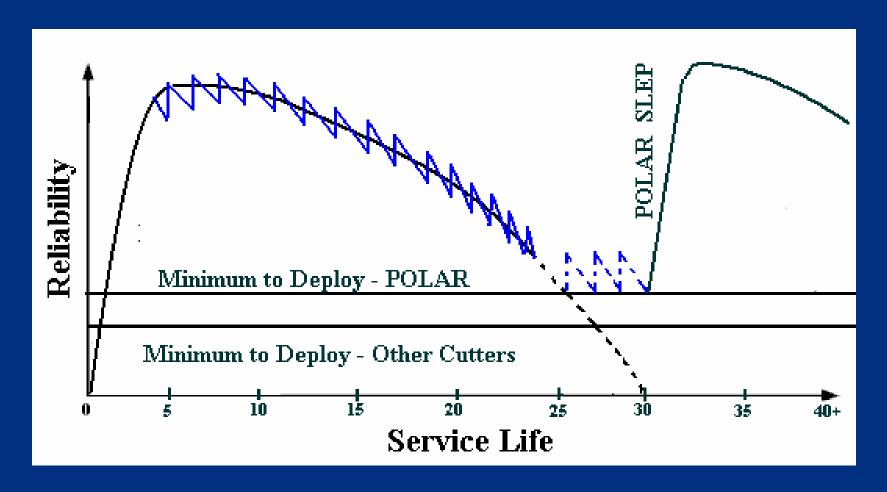
- FY05 RP zeroed out
- FY06 RP requests \$7M SSL increase and 5 billets

Polar SLEP RP (06-108-0)

- FY05 RP was deferred
- FY06 RP requests \$6M and 18 billets
- Aggressive schedule estimates completion 6 yrs after initiation
- Estimated total cost of \$465M



Strategy to Maintain Capability



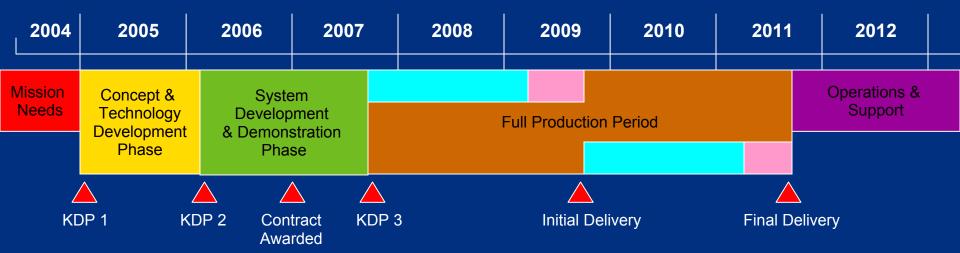


Acquisition Timeline

Initial estimates for continued service through 2035 for <u>BOTH</u> POLAR SEA & POLAR STAR:

Replacements: \$1.2BUpgrades: \$500M

Notional Schedule (Calendar Year)





Operational Cost Analysis

Final report delivered by AMSEC in November 2003.

Analysis of propulsion alternatives based on total ownership cost, operational capability, and reliability.

Results reinforced previous data on need for a SLEP.

Continuing to refine the machinery plant alternatives and move forward along the design spiral.

ELC and SEN are currently drafting a statement of work addressing feasibility concerns raised during previous studies.



Science Capabilities

The Coast Guard and science community need to work together to incorporate the desired science capabilities into the SLEP acquisition process.

The science capabilities will have a large impact on the overall project.

From an acquisition perspective, it is important that we begin to refine the desired science capabilities to address the technical feasibility and budget for the overall design.



SLEP Marketing Strategy

Complete mission needs analysis

Submit mission needs analysis to start major acquisition

Inform DHS, OMB, HAPPS, & others of mission importance & need to have icebreaking assets

- Coast Guard will need NSF, NOAA, USARC, & PRB assistance
- focus on results of mission needs analysis as document that summarizes "national" polar icebreaking needs

Coast Guard will need an inter-agency effort to help "market" the need for national polar icebreaking resources



Questions



